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INDEX

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Guide to Use of Index

AN INDEX always represents a compromise between the indexer's desire to arrange information in neat parcels and the reader's urgent wish to find what he wants quickly under the term that comes first to his mind. In this index, we have attempted to consider the reader's desires first without sacrificing reasonable economy and bulk. The preparation of this index represented several additional problems. The years 1951–1967 have been years of great scientific ferment. Many terms that were in current usage in 1951 are only of historical interest. We have attempted to index concepts under the terms used by the author and *also* if possible under the currently used terms. This policy has undoubtedly led to much duplication but we hope to few omissions.

It is hoped that users will read this introduction carefully since it explains the way in which the index has been arranged, and an understanding of this arrangement will add greatly to the ease of usage.

PART I. PRINCIPLES

The author and subject indexes have been combined in one alphabet. The subject index resembles that of *Chemical Abstracts*. The phrases modifying the subject headings have been made as short as possible—in each case only the major aspect of the paper in relation to the specific subject heading is given. For example, a paper entitled "Yawning and Associated Phenomena" would be indexed under YAWNING with the phrase, associated phenomena; but with no mention in this place that heart rate was one phenomenon studied, as well as vasoconstriction in toe and finger. Entries would also be made under HEART RATE, VASOCONSTRICTION as well as under TOE and FINGER.

In most cases the specific not the general subject heading has been chosen for the index. When a general subject heading has been used, the material listed under it is of so general a nature as to preclude the use of a specific heading. The user wishing all material on a given broad subject, such as antihistaminics, should look in the list of subject headings in Part II for the names of antihistaminic substances and then look in the index under each of the subject headings given.

Wherever practical the page number used refers to the exact page in the article on which the information is to be found; or when a given piece of information is mentioned more than once, the *first page* on which it is mentioned. Where it was not practical to do this, the reference is to the first page of the paper.

Many of the subject headings are followed by a definitive word or phrase such as PROTEIN (DIETARY); PROTEIN (AS TISSUE CONSTITUENT).

For every paper the following items studied or described by the investigators were indexed:

1) Organ or anatomical system
2) Physiological states and functions
3) Pathological condition
4) Special tests, measurements, and apparatus
5) Chemical substances or compounds
6) Species of animals

1) Organ or Anatomical System. Wherever possible, the anatomical entries appear under the name of the organ or system, not under the adjective referring to that organ or system—e.g. *stomach* rather than gastric; *liver*, not hepatic. This rule has been modified, however, to take care of usage; we normally speak and write of *cardiac output*, not *heart output*. In cases such as the latter, if the bulk of material was small enough, the papers have been indexed in both places, i.e., under CARDIAC OUTPUT and under HEART; whenever the bulk of material made such double entry impractical, cross references are given.

Large groups of entries under an organ have been broken into small groups for ease of searching. Where a paper seemed to fit equally well into two of the small groups, an entry has been made in each group. This does not mean, however, that all entries under HEART METABOLISM deal only with metabolism or, conversely, that none of the other papers under HEART— have anything to do with metabolism. The user should bear in mind that these groupings are relative and are primarily to aid searching. For a definitive search of *all* material on *metabolism of the heart*, all entries under HEART—must be scanned.

2) Physiological States and Functions. We have followed common usage in choosing subject headings in this category regardless of the merits of less popular synonyms. The less commonly used terms have been included with a *see* reference to the more popular terms. In cases where the bulk of material was too large to duplicate entries under both the anatomical and the physiological heading, the anatomical heading has been given preference.

3) Pathological Condition. The same policy as in *2* above has been used with names of diseases and pathological conditions.

4) Special Tests, Measurements, and Apparatus. New apparatus, tests, and methods of determination have been indexed under the thing measured, under the name of the apparatus or test, or under both.

5) Chemical Substances or Compounds. The adequate indexing of pharmacologically active compounds is one of the most difficult problems in an index like this one. A compound may have a chemical name, one or more trade names, a name approved by the AMA Council on Pharmacy, a common name, and a pharmaceutical house number such as F933 (the Forneau number for 2-piperidyl-methyl, 11,4-benzodioxan). An author may use one or more of these names in a paper; a user of the index may know only one of them. We have attempted to list the references to a drug under the most commonly used term, judging in part from the use of such terms in this journal. In addition we have provided a cross-reference pattern from the other names.

In regard to the chemical names we have used the names preferred by *Chemical Abstracts*, but have arranged them in direct rather than in inverted order. *Chemical Abstracts* uses PYRIDINE, 2-[(DIMETHYLAMINOETHYL)-2-THENYLAMINO] as an entry; in this index that compound would appear as 2-[(2-DIMETHYLAMINOETHYL)-

2-THENYLAMINO], PYRIDINE and would be alphabetized under DI. Substituted compounds of the same parent chemical structure with similar pharmacological properties have been grouped under the name of the parent compound to save duplication of entries, e.g., all androstanediols such as *3α, 17β, acetate-3 Androstanediol* are entered under ANDROSTANEDIOLS. If an author has used a chemical name other than the preferred one, that name has also been included in the index with the necessary cross reference.

As with the anatomical headings, many large groups of entries have been broken into smaller groups for convenience in searching; e.g. PROTEIN (DIETARY); PROTEIN (AS TISSUE CONSTITUENT); PROTEIN METABOLISM. The entries in these small groups are not mutually exclusive, and if a complete search for protein metabolism is needed all groups must be scanned.

6) Species of Animal. Where data pertaining to a given animal are given in a paper, the paper is indexed under the name of the animal, e.g., rabbit. (Where age is an important factor the article has been included under the subject heading AGE.)

In the case of experimental work on human beings all papers have been listed under MAN.

PART II. LIST OF SUBJECT HEADINGS

The problem of *see also* references is a major one in the preparation of any subject index. *Quarterly Cumulative Index Medicus, Chemical Abstracts,* and *Biological Abstracts* use many *see also* references; *Index Medicus* uses mainly *see* references. For a complete pattern of *see also* references under a heading like VITAMIN B-COMPLEX, the reader should be referred to each member of the complex used as a heading, e.g., THIAMIN, RIBOFLAVIN: each disease name under which the effects of either a lack of or the presence of a member of the vitamin B complex is indexed, e.g., HYPERTHYROIDISM, BERI-BERI; each organ or tissue affected, e.g., NERVE; each physiological state or reaction, e.g., CHRONAXIE, and so on. Moreover, each subject heading referred to should also lead to all other subject headings in the original list and back to the vitamin B complex. The magnitude of such a pattern is such that it can seldom be adhered to consistently throughout an entire index. Such a pattern would also require an enormous amount of space.

Indexers have long questioned how thoroughly *see also* references are used. At best they probably serve only as a reminder to the user of related subject headings under which he might find items of interest. Theoretically the problem would be solved by gathering together all entries under all pertinent specific and general headings. If this procedure were used, it should be followed consistently or the user would be misled and would miss many pertinent entries. There are a number of reasons against its use. The first, of course, is that the large bulk of material that would result would not only make the index exceedingly bulky and expensive, but would also increase the number of entries under each subject heading and reduce the ease with which the index could be scanned. In the second place, it is doubtful whether any indexer could manage to list *all* items under *all* related headings so that *all* users could obtain *all* the information needed under *one* subject heading.

In this index, we have attempted to solve the problem of giving the user the information he needs about related subject headings by including lists of subject headings in the introduction. These subject headings have been divided primarily into five of the categories used for indexing, i.e., ORGAN OR ANATOMICAL SYSTEM; PHYSIOLOGICAL STATES AND FUNCTIONS; PATHOLOGICAL CONDITIONS; CHEMICAL SUBSTANCE AND COMPOUNDS; and SPECIES OF ANIMAL STUDIED. Each group has been broken into smaller groups, the members of each subgroup having a single axis of categorization in common. The axis used, however, shifts from subgroup to subgroup, e.g., all body fluids are grouped together on the physical basis of being fluid; all nerves are grouped together on the anatomical basis of being nerves; but all members of the digestive tract are grouped together on the basis of function. The headings given to the various subgroups should be labeled "subject headings referable to the digestive tract," ". . . to the body fluids," etc., as some terms not strictly following the axis for categorization have been included, e.g., SWEAT has been placed in the list with fluids. No attempt has been made to arrive at groups that are completely logical—usability not logic has been the guiding principle. Subject headings that did not group conveniently on ony one axis used have been allowed to stand alone near a list of related subject headings.

Not all the subject headings have been used. The lists have been kept to a minimum to permit ease of scanning. Many have been left out, especially in the list ot chemical subject headings. Where several subject headings begin with the same word or syllable, only the common part of the headings has been used, e.g., Digit—for DIGITALIS, DIGITOXIN, etc. This will provide the user with a clue to the part of the alphabet in which he should look for material on the subject.

It is hoped that the user will make extensive use of these lists when searching for anything except a very specific subject. For example, if he wishes all material on anithistaminics he can find under the major category of CHEMICAL SUBSTANCES the list of antihistaminics indexed; namely, ANTISINE, BENADRYL, DRAMAMINE, and PYRIBENZAMINE. He then can look in the index for those in which he is interested. He can also find under PATHOLOGICAL CONDITIONS those pathological conditions in which antihistaminics might have been used, e.g., ALLERGY, ANAPHYLACTIC SHOCK, TRYPSIN SHOCK, and so forth.

SUBJECT HEADINGS REFERABLE TO ANATOMICAL TERMS

Systems[1]

Autonomic nervous
Cardiovascular
Central nervous
Lymphatics
Nervous
Neuromuscular
Parasympathetic nervous
Sympathetic nervous

Parts of Body

Body fat
Foot
Hair
Surface area
Skin

Fluids

Bile
Blood
Body——
Cerebrospinal——
Extracellular——
Fluid
Gastric
Interstitial
Intestinal
Intracellular
Lymph
Saliva
Semen
Serum
Sweat
Urine
Venous——

Blood, Formed Elements

Erythrocytes
Granulocytes
Leukocytes
Monocytes

Respiratory System

Bronchi——
Diaphragm
Lungs
Respiratory tract
Trachea

Tissues and Cells

Cells
Collagen
Cytoplasm
Fibroblast
Reticulum
Membrane
Mitochondria
Nucleus

Adipose
Brown fat
Endothelium

Supporting Structures

Bone
Cartilage
Synovial membrane
Tendon

Glands

Mammary
Salivary
Sebaceous
Sweat

Endocrine Glands

Anterior pituitary
Adrenal
Neurohypophysis
Parathyroid
Pituitary
Thymus
Thyroid

Urinary Tract

Bladder
Kidney
Ureter

Muscles

Gastrocnemius
Muscle

Eye

Eye
Iris
Lens
Nictitating membrane
Pupil
Retina

Ear

Cochlea
Ear

---

[1] Look under names of system, gland, artery or vein, i.e. cardiovascular, ductus venosus.

CARDIOVASCULAR SYSTEM

Blood vessels
Capillaries
Heart
Pacemaker

VEINS

Veins

ARTERIES[1]

Aorta
Arter——
Hepatic
Pulmonary

ALIMENTARY TRACT

Colon
Epiglottis
Gastrointestinal tract
Intestines
Liver
Pancreas
Pylor——
Spleen
Stomach

REPRODUCTIVE SYSTEM

Gonads
Males
Penis
Testis
Uterus
Vagina
Placenta

NERVES

Audit——
Chorda tympani
Neuromuscular
Optic
Sciatic
Splanchnic
Vagus

NERVOUS SYSTEM

Aortic body
Carotid sinus
Chemoreceptors
Ganglion
Motoneurons
Nerve——
Neurons
Synapses
White matter

CENTRAL NERVOUS SYSTEM

Brain
Brain stem
Cerebellum
Cerebral cortex
Diencephalon
Frontal lobe
Hypothalamus
Medulla oblongata
Optic tracts
Pons
Respiratory center
Spinal cord
Thalamus
Vasomotor centers

SUBJECT HEADINGS REFERABLE TO PHYSIOLOGICAL STATES OR CONDITIONS[2]

REPRODUCTION

Lactation
Ovulation
Parturition
Pregnancy
Puberty
Reproduction
Sex

CNS AND NEUROMUSCULAR

Activity
Adaptation
Behavior
Cerebral——
Neuromuscular
Sleep
Transmission

SPECIAL SENSES

Audition
Dark adaptation
Taste
Temperature
Vision
Warmth

CARDIOVASCULAR

Blood flow
Blood pressure
Blood volume
Capillary permeability
Cardiac output
Circulation
Hematopoiesis
Heart rate
Vasoconstriction

REFLEXES

Reflexes
Vascular——

ALIMENTARY

Absorption
Appetite
Defecation
Digestion
Gastric
Peristalsis

---

[2] See also under organs.

METABOLISM	RENAL	POSTURE, MOTION	RESPIRATORY
Basal metabolic rate	Diuresis	Exercise	Respiration
Dehydration	Sweating	Posture	Vital capacity
Gluco——			
Glyco——			
Ketolysis			

GENERAL	
Age	Hibernation
Body temperature	Mitosis
Differentiation	Nutritional status
Fasting	Oxidation
Growth	Proteolysis
Heat regulation	

SUBJECT HEADINGS REFERABLE TO PATHOLOGICAL STATES OR CONDITIONS

BLOOD, BLOOD CELLS	BLOOD CONSTITUENTS	CARDIOVASCULAR	DIETARY, METABOLIC
Anemia	Hypercholesteremia	Atherosclerosis	Acidosis
Edema	Hypoglycemia	Hyperemia	Alkalosis
Hemo——		Hypertension	Diabetes
Hodgkins disease		Tachyphylaxis	Ketosis
Leukemia			Obesity
Polycythemia			Phenylpyruvic Oligophrenia
			Xanthom——

DEFICIENCY DISEASE[3]	POISONING	OPERATIVE PROCEDURES	CAUSED BY INVADERS
Anorexia	Alcohol	Anesthesia	Gastritis
Pellagra	Chloroform	Chloroform	
	Lead	Cyclopropane——	
		Hypophysectomy	

LIVER	RESPIRATORY	CENTRAL NERVOUS SYSTEM
Hepatitis	Anoxia	Decerebrate——
	Bronchoconstriction	Electroshock
	Cough	Epilepsy
		Mental——

ALLERGIC	REPRODUCTIVE	ENDOCRINE
Anaphylaxis	Turner's syndrome	Goiter
Erythroblastosis fetalis		Hyperthyroidism
		Myxedema
		Hyperparathyroidism

[3] See also under name of substance, e.g. thiamine deficiency.

Blast injury
Pain
Shock
Stress
Trauma

Constipation
Gangrene
Neoplasms

SUBJECT HEADINGS REFERABLE TO CHEMICAL SUBSTANCES

Elements and Compounds

Cations and Elements

Ammonia
Arsenic
Cadmium
Calcium
Carbon
Copper
Cobalt
Fluoride
Hydrogen
Iodine——
Iron
Lead
Magnesium
Manganese
Mercury
Molybdenum
Nickel
Nitrogen
Oxygen
Phosphorus
Potassium
Radium
Silver
Sodium
Strontium
Thorium
Vanadium
Zinc

Anions

Bicarbonate
Bromide
Carbon dioxide
Chloride
Cyanide
Fluoride
Iodide
Nitrite
Phosphates
Sulfate
Thiocyanate

Food and Tissue Constituents

Carbohydrates

Arabinose
Carbohydrates
Fructose
Fucose
Galactose
Glucose
Glycogen
Heparin
Mannose
Sugars
Xylose

Lipids

Acetal phosphatides
Cardiolipin
Cerebrosides
Cholesterol
Choline
Fat
Fatty acids
Glycerol
Inositol
Lecithin
Lipids
Phosphatides
Phospholipids
Sphingomyelin
Sphingosine

Amino Acids

Amino acids
Arginine
Asparagine
Aspartic acid
Cysteine
Dopa——
Glutamate
Glutamine
Glycine
Histidine
Isoleucine
Leucine
Lysine
Methionine
Norleucine
Ornithine
Phenylalanine
Proline
Serine
Threonine
Tryptophan
Tyrosine
Valine

Proteins

Albumin
Acetomyosin
Adenosine
Adenine
Ferritin
Fibrinogen
Globulin

Metabolites

Acetoacetate
Acetoin
Acetyl
Creatine
Creatinine
Glycerophosphate
Glyceraldehyde

Vitamins

Adenosine triphosphate (ATP)
Ascorbic acid
Biotin
Folic acid
Glutathione
Growth factors

Proteins (cont.)

Hemoglobin
Myelin
Nucleoproteins
Peptides
Protein

Metabolites (cont.)

Glycero——
Isocitric acid
Keto acid
Lactate
Malonate
Oxalate
Pyruvate
Urea

Vitamins (cont.)

Niacin
Niotinamide
Nucleotides
Pantothenic acid
Phosphagen
Phosphocreatine
Pyridoxal
Pyridoxine
Thiamine
Uric acid
Vitamin

DRUGS

CNS Depressants

Anesthetics
Chloral hydrate
Cyclopropane
Ether
Nitrous oxide
Salicylates

Amytal
Barbiturates
Phenobarbital
Anticonvulsant

Local Anesthetics

Procaine
Cocaine
Anthelmintic compounds

Antihistaminics

Antihistaminics
Benadryl
Dicumarol

Alkaloids

Alkaloids
Guanidines

Curare
Morphine
Yohimbine

CNS Stimulants

Amphetamine
Caffeine
Nicotine
Strychnine

Sulfa Drugs

Sulfonamides

Sympathomimetic Drugs

Sympathomimetic amines

Atropine-like

Atropine

ENZYMES

Coenzymes

Coenzymes
Cytochrome *c*
Dehydrogenase
Diphosphopyridine nucleotide

Oxidation-Reduction

Dopa oxidase
Lactic dehydrogenase
Peroxidase
Succinoxidase
Uricase
Xanthine oxidase

Ester Hydrolyzing

ATPase
Cholinesterase
Esterase
Lipase
Lecithinases
Phosphorylases

Carbohydrate Hydrolyzing

Amylase
Invertase
Lactase

Nonpeptide C–N Hydrolyzing

Arginase
Urease

Protein Hydrolyzing

Cathepsins
Chymotrypsin
Pepsin
Papain
Peptidase

Enzyme Inhibitors and Antimetabolites

Alloxan
Azide
Carbon monoxide
Colchicine
Iodoacetate
Phlorizin
Thiourea

Miscellaneous

Carbonic anhydrase
Catalase
Enolase
Enzymes
Hexokinase
Hyaluronidase
Phosphoglucomutase
Prothrombin
Renin

Anticholinesterases

DFP

HORMONES

Pituitary

Adrenocorticotropic
Anterior pituitary
Growth
Hormones
Lutinizing
Pitressin

Adrenal Gland

Adrenocortical
Epinephrine
Norepinephrine

Estrogens etc.

Estradiol
Stilbestrol
Steroids

Androgens

Testosterone

Gastrointestinal

Gastrin
Secretin
Urogastrone

Other

Diiodotyrosine
Thyroxine

Insulin

Acetylcholine

MISCELLANEOUS

Antibodies
Antigens
Complement
Thromboplastin
Thrombin

Choline
Bile acids
Bile pigment
Bilirubin
Taurocholate

Angiotonin
Hypertensionogen
Pepsitensin

Carbohydrates
Diet

Foods

Beef
Bread
Butter fat
Cereal products
Corn oil
Egg
Flour
Food
Milk
Oils
Gelatin
Vegetables

Pigments, Dyes

Dyes
Melanin
Methylene blue

Toxins, Venoms, etc.

Toxins

Males
Age
Children
Fetus
Infants
Newborn

SUBJECT HEADINGS REFERABLE TO SPECIES OF ANIMALS

MICROORGANISMS

Aerobacter
Bacteria
Bacteriophage
Escherichia coli
Microorganisms
Viruses
Yeast

INVERTEBRATES

Arthropods
Bedbugs
Cephalopods
Coelenterates
Crustacean
Echinoderms
Homarus
Insects
Loligo
Molluscs
Protozoa
Sea urchin
Squid

VERTEBRATES

Elasmobranchs
Torpedo

Man
Monkey

Aves
Birds
Chicken
Duck
Fowls
Turkeys

Mammals
Manatee
Porpoise
Sea lion
Seal
Whale

Garden dormouse
Beaver
Ferret
Guinea pig
Hamster
Mouse
Gerbil

Cattle
Dog
Goat
Horse
Mule
Ox
Ruminants
Sheep

Catfish
Fish
Lungfish

Amphibia
Frog
Salamander

Lizard
Reptiles
Turtle

Muskrat
Rabbit
Rat

Bat
Elephant

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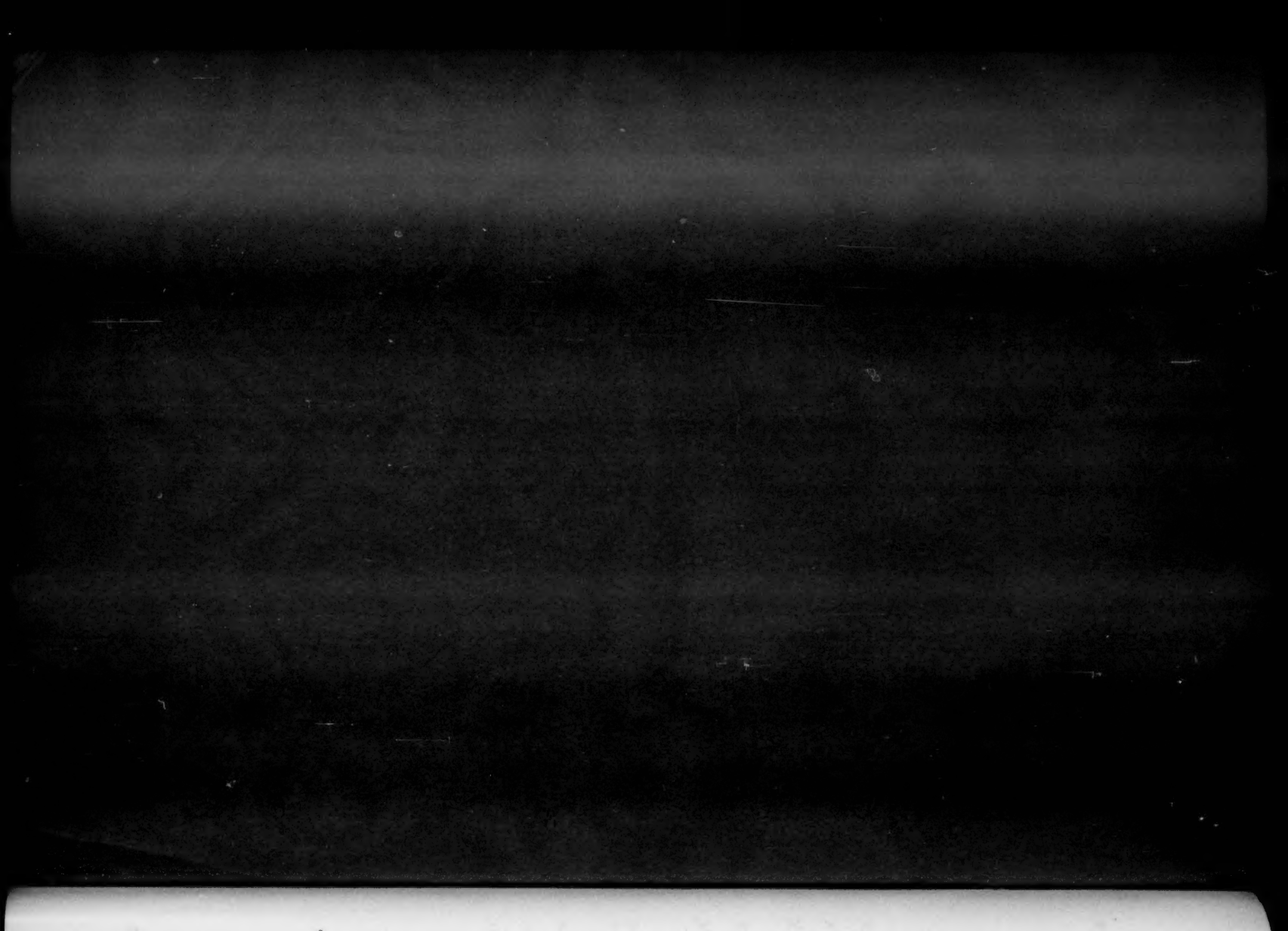
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